

## Medical News in brief

### THE CHANGING FACE OF HOSPITAL INFECTION

Introducing two articles on hospital disinfection, the editor of the *Deutsche Medizinische Wochenschrift* (81: 1217, 1956) comments on the new form of hospital infection which has grown up of recent years. Hospitals now harbour their own special brand of pathogen, which has passed through a twofold filter, the therapeutic filter of antibiotics and the human filter. The result of this double passage has been to produce a highly pathogenic and therapy-resistant pathogen, communicated chiefly through the air. In Germany from 10-50% of children who enter hospital acquire an additional infection during their hospital stay. Moreover in many cases an initial infection is complicated by reinfection with a new type of the same bacterial species. This cross-infection rate can be lowered by an attack upon the bacterial content of hospital rooms, which is surprisingly high.

In the first of the two articles following this editorial, Grün describes the good results which can be obtained in cutting down airborne infection in hospital by the additive effect of ultra-violet radiation and use of an aerosol of triethylene glycol. After prolonged use of the two techniques together, only spores and fungi, both unimportant for airborne infections, remained.

In the second article Knörr and Wallner discuss the acquirement of infections of the newborn from the nasopharynx of the nursing and medical staff. They found that antibiotic-resistant bacteria first appear in the nasopharynx of the newborn and only later on the mother's nipples. It is assumed that these bacteria reach the nasopharynx either from the air of the ward or more directly from the nursing staff and are transmitted to the mother's nipples during their nursing. Non-specific conjunctivitis of the newborn is presumably transmitted in a similar manner.

### OSTEITIS PUBIS IN THE FEMALE

The painful condition of osteitis pubis after prostatectomy is well known. Wiltse and Frantz (*J. Bone & Joint Surg.*, 38-A: 500, 1956) now report 13 cases of a similar condition in the female. Symptoms were noted in most cases after some traumatizing condition such as a pregnancy or pelvic surgery. Typically, a young woman complained of severe pain about the symphysis, the latter being tender but not swollen. There was no fever and no signs were ever found of infection or inflammation. Radiographs showed later in the disease spotty demineralization of the bone around the symphysis and finally sclerosis and narrowing of the symphysis. The disease was self-limited, recovery taking from a few weeks to three and a half years. The authors suggest that this is due to a localized reflex neurovascular dystrophy brought about by a combination of trauma and predisposing changes at the symphysis of the nature of hormone changes. Although the

pain may be completely incapacitating, treatment should be merely symptomatic, although x-ray therapy, cortisone, ACTH and possibly phenylbutazone may be of value.

### THE STIFF-MAN SYNDROME

Moersch and Woltman of the Mayo Clinic (*Proc. Staff Meet., Mayo Clin.*, 31: 421, 1956) report a very puzzling neurological condition which they first observed in 1924 and of which they have collected 14 cases. In all the cases the history is very much the same. There is a varying rapidity of onset of muscular rigidity with associated spasms. Most of the patients are males and their illness has begun at some period between 28 and 54 years of age. With one exception all patients have shown gradually increasing disability and the muscles involved are chiefly those of the trunk, neck and shoulders and limbs. This mysterious syndrome for which no cause has been found, which is associated on examination only with signs of fluctuating muscular rigidity and spasm, which yields little information on laboratory study beyond the finding in four cases of a reducing substance in the urine, and for which no therapy is of value, has been nicknamed by the authors the "stiff-man" syndrome. The authors suggest that it may have a metabolic basis, but whether the spinal cord or the basal ganglia are involved is yet undecided.

### INTRAVENOUS CHOLANGIO- CHOLECYSTOGRAPHY

Hardie and Israelski (*Brit. M. J.*, 2: 779, 1956) report their findings after the examination of 106 patients with Biligradin (Cholografin) in 106 cases, 75 with an intact gallbladder and 31 after cholecystectomy. In some cases comparison was made of the results of oral cholecystography with Biligradin intravenous cholecystography. Stones were discovered in the gallbladder or the common duct in no less than 20 cases in which an unsuccessful result had been obtained by the oral method.

The authors consider that intravenous cholangio-cholecystography with Biligradin is a quick, safe and reliable method of examination in biliary tract disease. It is usually ineffective, however, if there is obstructive jaundice or severe liver insufficiency, although its attempted use in such cases is harmless. Intravenous cholangio-cholecystography might be substituted for the oral route as the primary method of investigation, although if it was desirable to assess the concentrating power of the gallbladder, supplementary oral cholecystography could be used. In abdominal emergency, the use of intravenous Biligradin may offer a means of quick differential diagnosis by confirming or excluding the biliary tract as the cause of symptoms. The main advantage of intravenous cholecystography is the great regularity with which the common bile duct is outlined. After cholecystectomy, intravenous injection of Biligradin is the only practical, nonoperative method of examining the bile duct.

(Continued on advertising page 51)

## MEDICAL NEWS in brief

(Continued from page 767)

### POSTCONCUSSIONAL SYNDROME IN OTOTOLOGY

Muzzio and his colleagues in Buenos Aires (*Prensa méd. argent.*, 43: 1762, 1956) have studied the otological findings in 286 cases of postconcussional syndrome. They find that changes in the labyrinth appear in less than 20% of all postconcussional cases. They describe their method of examination of the eighth nerve. In 80% of cases of postconcussional syndrome (headache, vertigo, changes in intelligence and character, vasomotor signs) rotation tests gave a normal result. In the others there was an equal distribution between hypoexcitability of the vestibular apparatus and hyperexcitability. Caloric tests demonstrated changes in 40% of cases. Failure to demonstrate labyrinthine changes does not necessarily rule out a traumatic origin of the patient's symptoms. The prognosis of otological conditions associated with concussion is usually favourable, although symptoms may take a long time to disappear.

### ALCOHOLISM AND TRAFFIC ACCIDENTS

The common association between consumption of alcohol and traffic accidents is of great interest both to legislators and to physicians. It is clear that educational methods involving such slogans as "If you drive, don't drink" or legal sanctions of varying degrees of severity will reduce the accident rate only if the users of alcohol concerned are not compulsive drinkers.

R. E. Popham of Toronto (*Quart. J. Stud. Alcohol*, 17: 225, 1956) has made a preliminary statistical study of persons involved in traffic accidents in Toronto during 1954 and charged with impaired or drunken driving. The incidence of persons on this list who had received clinic treatment for alcoholism was greater than would have been expected if the drinking population of Toronto was uniformly involved. Popham therefore suggests that the drunken driver is to a large extent a problem of alcoholism and therefore represents as much a matter of treatment and preventive medicine as of legislation.

### RESEARCH AT THE HOSPITAL FOR SICK CHILDREN, TORONTO

The second Annual Report of the Research Institute of the Hospital for Sick Children, Toronto, covering the period from January 1-December 31, 1955, is a most useful and instructive document. The report gives a good picture of the great volume and variety of research being conducted in this

institution. Stress is laid on the major development in 1955, the opening of the Clinical Investigation Unit or Metabolic Ward. This ward, opened on February 14, 1955, functions as a self-contained service under the general direction of Dr. A. L. Chute, with Dr. A. Sass-Kortsak in charge. During the ten months in 1955 there were 51 admissions of 40 patients who stayed in the ward on an average

(Continued on page 52)

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The investigators report on a total of 109 cases of herpes zoster and 313 cases of neuritis, all of whom were seen in private practice. All but one patient in each category responded with complete recovery.

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## MEDICAL NEWS in brief

(Continued from page 51)

for four weeks. The main diseases studied in the ward were steatorrhea, pituitary dwarfism, calcium and phosphorus metabolic disturbances, renal disease, and the condition of babies of diabetic mothers. The salaried staff of the Institute remains at about the same level as in 1954 and emphasis continues to be placed on commoner forms of disease and disability in children.

The Director, Dr. A. J. Rhodes, urges his staff in his report to publish results of their studies expeditiously. He says that not infrequently excellent material lies unpublished while the prospective author investigates some new idea.

Research programs range through the whole field of pædiatrics. It is interesting to note that studies of antibiotic sensitivity have shown that, as elsewhere, the incidence in strains recovered from patients in outpatient clinics is only about one-half of that in strains recovered from inpatients. Various studies of nephrosis are showing that intermittent cortisone therapy gives a considerable degree of control over this disease, and some of the more recent cortisone derivatives are now being used with good results. An interesting metabolic disorder under study is that of vitamin D resistant rickets. It has been shown that rapid healing of rachitic lesions in these children can be brought about without increasing vitamin D intake by establishing physiological levels of serum phosphorus. To date this has been obtained by intravenous injection of sodium phosphate. The relationship of hypertension in children to aldosterone metabolism is also under study. In the cardiology section, selective angiography as a diagnostic procedure is under investigation. A follow-up study of the comparative effects of ACTH, cortisone and salicylates in therapy of acute rheumatism and a study of effects of the sulfonamides and penicillin in preventing rheumatic fever are continuing. The geneticists are investigating quite a number of problems including some related to mongolism, cleft lip and cleft palate, Legg-Perthes disease, and muscular and neuromuscular disorders. Work in the hearing clinic continues, and the ophthalmologists have brought to a conclusion a long study of strabismus;

evaluation of operative procedures for squint will be made at a later date. Study of neonatal mortality and morbidity continues and a team has been organized to study neuromuscular disorders, especially muscular dystrophy. Schizophrenia and convulsive disorders are under investigation. In the field of surgery, there is a study of all cases of bone and joint tuberculosis treated at the hospital, and also one on fractures of the elbow in chil-

dren. Burns and the healing of tendons are also subjects of research.

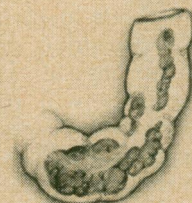
In the virus research department, it is reported that in cases of non-paralytic poliomyelitis many patients were found to be infected with the newly described group of "echo" viruses. Coxsackie virus and the etiology of epidemic croup have been worked on. The discovery of APC virus disorders in Toronto is noted.

# DOXINATE

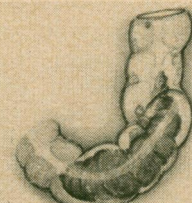
Hard fecal masses



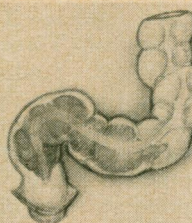
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## HOSPITAL ACCREDITATION IN U.S.A.

It will be recalled that a committee of the American Medical Association reviewed the subject of accreditation of hospitals earlier this year and presented a report to the House of Delegates of the A.M.A. in June 1956. This report has been termed the Stover Report, in honour of the chairman, Dr. Wendell C. Stover.

The Board of Commissioners of the Joint Commission on Accreditation of Hospitals held a meeting late in July in Chicago and reviewed the Stover Report. In the *Bulletin of the Joint Commission* for August 1956, the conclusions of the Board of Commissioners in relation to the Stover Report are set out in detail. The Board of Commissioners agreed that accreditation of hospitals should continue and that the Joint Commission

should maintain its present organizational representation. The Stover Committee stated that physicians should be on the administrative bodies of hospitals; the Commissioners were not sure about this and felt that the composition of the governing board of a hospital should be determined at the local level, while emphasizing the need for close liaison between the medical staff and the governing board. Whereas the Stover Committee suggested that general practice sections in hospitals be encouraged, the Commissioners felt no need to change their present policy, which is to leave the decision as regards establishment of a general practice department to local medical staff. The question of acceptable staff meetings required by the Joint Commission is referred to a committee for further study. Neither the Stover Committee nor the Commissioners felt that multiple staff appointments should be restricted by them. It was agreed that the Joint Commission should not be a punitive body. It was also agreed that reports on surveys should be sent to both the administrator and the chief of staff of hospitals. No objection was made by the Commissioners to the Stover Committee's statement that surveyors should be directly employed and supervised by the Joint Commission. It was agreed that new surveyors should receive better indoctrination than in the past. The Commissioners did not of course comment on the suggestion that the A.M.A. should conduct an educational campaign for doctors related to the functions and operations of the Joint Committee, or that the A.M.A. and the American Hospital Association should encourage educational meetings for hospital boards, for trustees and administrators to acquaint these bodies with the functions of accreditation.

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\*Spiesman, M. G., and Malow, L.: New Fecal Softener (Doxinate) in the Treatment of Constipation, *Journal-Lancet* 76:164 (June) 1956.

\*\*Antos, R. J.: A New Approach to the Treatment of Severe Constipation, *Southwestern Med.* 37:236 (April) 1956.

**DOSAGE:** ADULTS: 2 or 3 capsules daily.  
INFANTS: 1 or 2 cc. 4 times daily in milk, formula or fruit juice.

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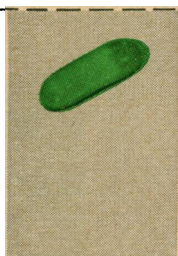
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### SECRETS OF THE HEART

"Secrets of the Heart," an American Heart Association documentary film on research related to cardiovascular disease, was shown on September 14 in New York City. The première was sponsored by the American Heart Association and the New York Heart Association. The film, which was written and directed by George C. Stoney, emphasizes the value of basic re-

(Continued on page 54)

## MEDICAL NEWS in brief

(Continued from page 53)

search in the cardiovascular field by showing in behind-the-scenes sequences six current studies in basic research including ventricular fibrillation and capillary function. The object of the film is to show the public the value of basic research, to which the American Heart Association has given much support in its national research program. Dr. Irvine H. Page, President of the American Heart Association, acts as commentator and guide throughout the film, which runs for 29 minutes. The same director and film company were responsible two years ago for a prize-winning documentary, "The Valiant Heart".

AMERICAN BOARD OF  
OBSTETRICS AND  
GYNECOLOGY

The next scheduled examinations (Part I), written, and review of case histories for all candidates will be held in various cities of the United States, Canada, and military centres outside the Continental United States, on Friday, February 1, 1957, at 2.00 p.m. Candidates must submit case reports to the office of the Secretary within 30 days of being notified of their eligibility for Part I.

Requests for re-examination in Part II must be received before February 1, 1957.

Current bulletins may be obtained by writing to: Robert L. Faulkner, M.D., Secretary, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

KENNY FOUNDATION  
SCHOLARSHIP PROGRAM

The Sister Elizabeth Kenny Foundation announces a program of postdoctoral scholarships to promote work in the field of neuromuscular diseases. These scholarships are designed for scientists at or near the end of their fellowship training in either basic or clinical fields concerned with the broad problem of the neuromuscular diseases.

The Kenny Foundation Scholars will be appointed annually. Each grant will provide a stipend for a five-year period at the rate of \$5,000 to \$7,000 a year depending upon the Scholar's qualifications.

Candidates from medical schools in the United States and Canada will be eligible.

Inquiries regarding details of the program should be addressed to: Dr. E. J. Huenekens, Medical Director, Sister Elizabeth Kenny Foundation, 2400 Foshay Tower, Minneapolis 2, Minnesota.

COURSE IN  
ELECTROCARDIOLOGY

A course in practical electrocardiology will be presented

December 3-7, 1956 in Houston, Texas, by Dr. Demetrio Sodi-Pallares, Chief of the Department of Electrocardiology at the National Institute of Cardiology, Mexico City, under auspices of The University of Texas Postgraduate School of Medicine and Baylor University College of Medicine.

In addition to Dr. Sodi-Pallares' evening course and his clinical pathological conference discussions, individual instruction in reading electrocardiograms will be provided by faculty members of

# In "Menstrual Anemia"

## The Bibliography Specifies

# RONCOVITE

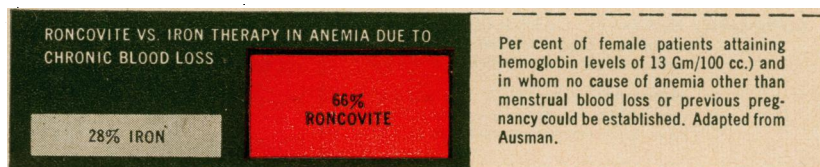
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the sponsoring institutions. For more advanced students, panel discussions will be held on subjects of special interest to electrocardiologists. Inquiries should be addressed to: The University of Texas Postgraduate School of Medicine, Texas Medical Center, Houston 25, Texas.

## BACTERÆMIC SHOCK

It has long been recognized that such diseases as typhoid fever,

meningococcal infections and similar infectious diseases, which may be characterized by bacteræmia, may also be complicated by hypotension. The exact mechanisms operative in the genesis of bacteræmic shock are not known, but many workers have contributed experimental data indicating that the profound shock is due to hypotension-inducing toxins, produced by the bacteria. Dunn and Nichols (*Proc. Staff Meet. Mayo Clin.*, 31: 333, 1956) review 137 cases of

bacteræmia due to Gram-negative bacilli, and indicate that hypotension, as a manifestation of bacteræmia, was detected in seven of these cases. In this study, coliaerogenes organisms were the commonest Gram-negative bacilli to invade the blood stream, and all seven of the patients with bacteræmic shock in this series were infected with these organisms. Approximately 10% of patients with Gram-negative bacteræmia have diabetes mellitus. One should therefore never hesitate to culture the blood of diabetic patients who have fever not immediately explainable. One should also be especially wary of the possible complication of bacteræmia in diabetic patients when urinary infections exist. Treatment during the period of hypotension is aimed at restoration of the circulation before renal ischæmia has lasted long enough to produce organic renal damage. When anuria or oliguria results, it is treated in the same fashion as renal shut-down from other causes. The writers stress also the unquestionable need for appropriate antibacterial therapy in bacteræmic shock. They recommend the use of one of the tetracycline group combined with a streptomycin compound and indicate that, in special cases, the use of polymyxin B appears to be justifiable. Both streptomycin compounds and polymyxin B should be used with caution in cases with renal insufficiency. In addition to appropriate early and vigorous antibacterial therapy, the use of parenteral vasoconstrictor drugs like levarterenol, methoxamine and metaraminal has been demonstrated to produce definite rises in the blood pressure. The use of whole blood, plasma, or dextran does not seem to improve the outcome in these patients.

## RONCOVITE TABLETS:

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- Holly, R. G.: Anemia in Pregnancy, *Obst. & Gynec.* 5:562 (April) 1955.  
Hill, J. M., et al.: Cobalt Therapy in Anemia, *Texas J. Med.* 51:686 (Oct.) 1955.  
Rohn, R. J.; Bond, W. H., and Klotz, L. J.: The Effect of Cobalt-Iron Therapy in Iron-Deficiency Anemia in Infants, *J. Indiana M.A.* 46:1253 (Dec.) 1953.  
Holly, R. G.: Anemia in Pregnancy. Paper delivered before Amer. Congress of Obstetrics and Gynecology (Dec.) 1954.  
Holly, R. G.: The Value of Iron Therapy in Pregnancy, *Journal Lancet* 74:211 (June) 1954.  
Quilligan, J. J., Jr.: Effect of a Cobalt-Iron Mixture on the Anemia of Prematurity, *Texas J. Med.* 50:294 (May) 1954.  
Hamilton, H. G.: The Use of Cobalt and Iron in the Prevention of Anemia of Pregnancy. Paper delivered at So. M. Assn., Houston, Texas, in press.  
Rohn, R. J., and Bond, W. H.: Observations on Some Hematological Effects of Cobalt-Iron Mixtures, *Journal Lancet* 73:317 (Aug.) 1953.  
Holly, R. G.: Studies on Iron and Cobalt Metabolism, *J.A.M.A.* 158:1349 (Aug. 13) 1955.  
Jaimet, C. H., and Thode, H. G.: Thyroid Function Studies on Children Receiving Cobalt Therapy, *J.A.M.A.* 158:1353 (Aug. 13) 1955.  
Klinck, G. H.: Thyroid Hyperplasia in Young Children, *J.A.M.A.* 158:1347 (Aug. 13) 1955.  
Tevetoglu, F.: The Treatment of Common Anemias in Infancy and Childhood with a Cobalt-Iron Mixture. *J. Pediat.* 49:46 (July) 1956.  
\*Ausman, D.C.: Cobalt-Iron Therapy in the Treatment of Some Common Anemias Seen in General Practice, *Journal Lancet* (Oct.) 1956.

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## NEW DIRECTOR FOR POLIO FOUNDATION

Dr. Thomas M. Rivers of New York City, formerly vice-president of the Rockefeller Institute for Medical Research, has been appointed medical director of the National Foundation for Infantile Paralysis. He succeeds Dr. Hart E. Van Riper, who left the National Foundation on October 31 to be-

(Continued on page 56)

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## MEDICAL NEWS in brief

(Continued from page 55)

come medical director of Geigy Pharmaceuticals of Ardsley, N.Y.

Dr. Rivers, who has been closer scientifically to the development and testing of the Salk vaccine than anyone except Dr. Jonas E. Salk himself, took over his new post on November 1.

## DAY HOSPITAL IN NEW YORK

The second day hospital to be organized by the New York State Department of Mental Hygiene has been opened in Brooklyn. The hospital will operate on a pilot basis to determine the value of psychiatric and supportive therapy for suitable patients with mental disorder in a hospital setting during the daytime hours. Patients at this centre, and at the other centre at Hudson River State Hospital, receive psychiatric care on a voluntary outpatient basis during the day, returning to their homes in late afternoon and continuing existing family and community activities. The new hospital will care for

40-50 adults and will operate for five days a week, from 9.30 a.m.-4.30 p.m. The treatment program will consist of individual and group psychotherapy, social casework, drug and electric shock therapy, occupational and recreational therapy, and sheltered workshop activity.

## SEX DETERMINATION BEFORE BIRTH

Sachs and his colleagues from Israel confirm their earlier findings that it is possible to diagnose fetal sex by analysis of amniotic fluid cells (*Brit. M. J.*, 2: 795, 1956). They have now studied 40 cases in the ninth month of pregnancy and eight cases in the third, sixth and seventh months of pregnancy. They find that the method is completely accurate. Diagnosis may be based on the percentage of cells with a chromocentre and also on the percentage of cells with a chromocentre at the nuclear membrane. The authors recommend the latter determination as a routine. In the 47 cases in the sixth, seventh and ninth months, there was a mean of 4% of cells with a chromocentre at the nuclear membrane in males, and a mean of 35% in females. The chromocentre was also larger in female cells than in male cells. Diagnosis can be made in normal cases from the third month and possibly even earlier. The only possible source of error is in the case of an intersex, whose appearance does not correspond to that expected from his or her sex chromosome constitution. Even in cases of twins it should be possible to make a correct diagnosis through the finding of both female and male patches of cells in the fluid. The most obvious clinical application of this technique is in cases of certain sex-linked abnormalities.

## IMMUNIZATION FOR INTERNATIONAL TRAVEL

The U.S. Department of Health, Education and Welfare has now revised the booklet "Immunization Information for International Travel". This booklet is prepared for the convenience of persons planning to travel abroad. It gives information on vaccination requirements of foreign countries, vaccination requirements for entrance into

the United States, other immunizations recommended for the traveler's own protection, international vaccination certificates and yellow fever vaccination centres. The booklet may be obtained at the cost of 25 cents per copy from the Superintendent of Documents, Government Printing Office, Washington, D.C. There is a 25% discount on orders of 100 or more delivered to the same address.

## PAN AMERICAN SANITARY ORGANIZATION


The Pan American Sanitary Organization held its ninth Directing Council meeting on September 17-27 in Antigua, Guatemala. The budget for 1957 for the Pan American Sanitary Bureau was fixed at \$2,400,000. This, together with the regional allocation of approximately \$1,400,000 from WHO and funds from the U.N. Technical Assistance Program, will help finance some 150 public health programs carried out by member governments, with the collaboration of the Bureau.

The Directing Council gave top priority to malaria eradication programs throughout the Americas, reaffirming the possibility of eradicating this disease from the Western Hemisphere, provided that international collaboration was sufficiently good. It was announced that the United States government would make a special contribution of one million and a half dollars to the Bureau for this campaign in 1957. An outstanding report was received from Mexico, a country containing some two-thirds of the malaria cases in the Western Hemisphere. The Mexican government is launching a major campaign on malaria and it is hoped to eradicate the disease entirely from the country within five years.

There was much discussion on the problem of leprosy. The advent of modern treatment with sulfones has completely altered the psychological approach to the disease. Public prejudices are breaking down and attitudes are changing as it is realized that there is no longer need for the leper to be an outcast. Like malaria, leprosy could also be eradicated from the Western Hemisphere, though the task will prove more lengthy and difficult.

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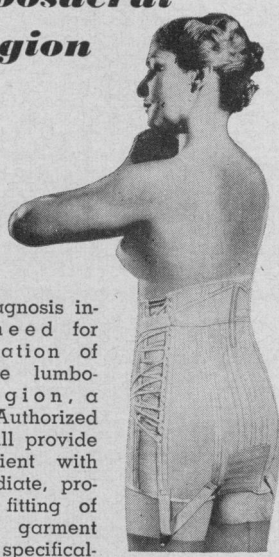





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(Continued from page 56)

In connection with the fellowship program, it was emphasized that there is still a grave shortage of technical experts in all branches of public health and preventive medicine throughout the Americas. There is therefore great need for expansion and improvement in training and education programs.

ANARTHROTIC  
RHEUMATOID DISEASE

A further 21 cases are described from Oxford (*Lancet*, 2: 694, 1956) of a syndrome affecting patients over 60 years old and bearing a remarkable resemblance to the prodromal symptoms of rheumatoid arthritis. The syndrome starts as a pyrexial illness with sweating, loss of appetite and weight, anaemia and general malaise. Often there are abdominal discomfort and headache. The commonest symptom is generalized aching, characteristically most severe in the muscles of the neck, shoulders and back. Rheumatoid nodules and rashes may occur. On examination there is little beyond muscle pain, limitation of movement, occasional lymph node enlargement, and a high ESR. Plasma fibrinogen level is very high, with decrease in blood albumin and increase in alpha globulin. There is secondary iron resistant anaemia.

Because symptoms and signs resemble those of prodromal rheumatoid arthritis before the joints are affected, and because in four cases there was an apparent transitional type between the present syndrome and a true rheumatoid arthritis, it is suggested that this syndrome be called "anarthrotic rheumatoid disease". Response to salicylates is fair, and the prognosis invariably good, though the illness may persist for months or years with remissions.

MEDICAL MOTION  
PICTURE WORKSHOP

The first Medical Motion Picture Workshop in the U.S.A. has been scheduled for February 4, 5 and 6, 1957. Developed specifically for medical film producers and medical audio-visual personnel, the Workshop will be presented on the

**S** In Antibiotic  
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sound stages of The Calvin Company in Kansas City, Missouri. This session was planned by Calvin personnel in co-operation with C. Graham Eddy and L. Paul Flory—Chief and Assistant respectively of the Medical Illustration Division of the Veterans Administration—and a number of audio-visual directors of national medical societies.

The three-day meeting will be devoted to discussion and screenings to assist photographers and producers in this specialized field, as well as to illustrate the history, increasing use and broadening production of motion pictures within the field of medicine. A \$60 tuition fee will cover all sessions and a banquet, and the Workshop will be open to anyone interested.

Principal speakers will be outstanding medical film producers and film authorities. Special sessions will present: Ralph Creer, Director of Motion Pictures and Medical Television, American Medical Association, Chicago, Ill.; Mervin W. La Rue, Sr., medical film producer, Chicago, Ill.; Dr.


(Continued on page 60)



# S In Antibiotic I Therapy...

# G M A M Y C I N

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of resistant  
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## MEDICAL NEWS in brief

(Continued from page 58)

Joseph Markee, Duke University School of Medicine, Durham, North Carolina; Dr. John L. Myer, II, U.S. Public Health Service Hospital, New York; Dr. David Ruhe, Head, Department of Audio-Visual Education, University of Kansas Medical Center, Kansas City, Kansas; Sy Wexler, Churchill-Wexler Film Productions, Los Angeles, Calif.; and Warren Sturgis, Sturgis-Grant Productions, Inc., New York.

Information from: The Calvin Co., 1105 Truman Rd., Kansas City 6, Missouri.

## ROENTGENOLOGICAL EVIDENCE OF CALCIFICATION IN A PERIPHERAL BRONCHO- GENIC CARCINOMA

The roentgenological demonstration of calcification in a solitary pulmonary mass has been a fairly reliable sign that the lesion is benign. This opinion has been maintained by many authors, al-

though the possibility has been admitted that, in rare instances, a malignant tumour might show evidence of calcification. Recently, reports have appeared of isolated cases in which calcification within a bronchogenic carcinoma could be demonstrated in preoperative roentgenograms. Good and McDonald (*Proc. Staff Meet. Mayo Clin.*, 31: 317, 1956) report a case in which an area of calcification was demonstrated before operation within a peripheral bronchogenic carcinoma, and in which it could be shown from earlier roentgenograms that the nidus of calcium had been present in the lung before the neoplasm was manifest, either clinically or roentgenologically.

This case demonstrates the fact that a bronchogenic carcinoma may give evidence of calcification in preoperative roentgenograms, and also one way in which this process may take place. In the case in question, the calcium had been deposited in the lung years before as the result of an inflammatory lesion, and it represented the healed scar of this disease process. This scar was engulfed by the growing neoplasm and was completely surrounded, although not invaded, by it. The case also demonstrates the value of obtaining for comparison any roentgenograms made in previous years. In this instance, the fact that the area of calcification had been present in roentgenograms made four years before enabled the roentgenologist to make a correct diagnosis of neoplasm. Despite this case report, the authors insist that, in the majority of cases, a solitary peripheral mass in the lung will usually prove to be benign if it contains roentgenologically demonstrable calcium. This is especially true if the mass is heavily calcified or if the calcium appears to be laid down in layers. However, the possibility that the tumour *may* be malignant must always be kept in mind. Significant symptoms of respiratory disease, especially haemoptysis, or evidence of growth obtained by the examination of serial roentgenograms, are strong arguments in favour of exploratory thoracotomy. In the absence of symptoms, however, and with the additional evidence of stability over a period of years, the calcified lesion need not be explored immediately. Nevertheless, it should never be dismissed as insignificant, but

should be kept under observation by means of semiannual or annual roentgenological examinations.

## CALCIFICATION WITHIN THE SOLITARY PULMONARY NODULE

The presence of calcification within a solitary intrapulmonary tumour is commonly regarded as evidence of its benign character. Excision is ordinarily considered unnecessary.

A case is reported by Davis, Katz and Peabody (*Am. Rev. Tuberc.*, 74: 106, 1956) in which a small circumscribed, partially calcified, innocuous-looking nodule in the apex of the right upper lobe proved to be a bronchogenic carcinoma. That the calcification lay within the tumour was confirmed by microscopic examination.

Whereas calcification in the form of diffuse stippling, inner laminations, an outer ring, or a relatively large central core almost assuredly indicates a granuloma, a few flecks of calcium are much less reassuring.

When there exists a disproportion between the size of the nodule and the degree of calcification, it may be safer to excise rather than observe the lesion. Certainly any increase in the size of the nodule is a cause for alarm regardless of the presence of calcification.

## MUSCLE LESIONS IN COLLAGEN DISEASES

Maurice of Geneva (*Rev. franç. études clin. et biol.*, 1: 772, 1956) examined histologically the muscles in persons suffering from collagen diseases, either by biopsy or at autopsy. He compared the findings in the 46 subjects available with those in 88 control cases. In 32 of the 46 cases a definite histological diagnosis could be made from examination of the muscle lesions, whereas in the 88 controls all studies were negative. Of the 32 patients with positive histological findings, only 10 had clinical symptoms attributed to muscle lesions. Patients were suffering from rheumatoid arthritis, lupus erythematosus, dermatomyositis, scleroderma, periarteritis nodosa and sarcoidosis. Histological findings were essentially those of angitis and of interstitial nodules arising

from a pericapillaritis, the first stage of a characteristic nodular interstitial polymyositis. A specific histological picture is found only in classical forms of periarteritis, in sarcoidosis and possibly in the angiitis of Wegener's syndrome.

### SALMONELLA ENTERITIS AFTER STOMACH OPERATIONS

Diarrhoea occurring after surgery for peptic ulcer is often incorrectly attributed to the nature of the operation. A recent report from the Massachusetts General Hospital shows that this is not always so. During the past two years nine cases of Salmonella infection have been observed in patients who had recently had a stomach operation. In several cases the true cause of the diarrhoea was not immediately evident. One patient died and most of the remainder were seriously ill, either in acute episodes or as a result of chronic infection. It is believed that such infections are probably widespread and responsible for much morbidity and occasionally death. Many such infections can be cured and it is therefore important to recognize them.

During 1954 and 1955, when the nine cases occurred, there were a total of 54 Salmonella infections in the hospital. The high proportion of patients who had undergone gastric surgery was impressive. Of the other infections, 17 occurred in children and may therefore be excluded from consideration, while five were the result of hospital infection from tube feeding mixtures containing a contaminated yeast. In two cases a surgical incision was infected with Salmonella. Diagnosis is by stool culture, though in chronic infections repeated tests may be necessary.—W. R. Waddell and L. J. Kunz, *New England J. Med.*, 255: 555, 1956.

### MYOCARDIAL INFARCTION DURING TREATMENT WITH HYPOTENSIVE DRUGS

Storstein (*Tidsskr. norske laegefor.*, 76: 594, 1956) has encountered seven cases of myocardial infarction in the course of 13 months in patients treated for from four days to three weeks with

rauwolfia alkaloids. Three of the patients died. In the same period the mortality rate among 52 other patients admitted with acute myocardial infarction was only 21%. The author warns against treating elderly patients suffering from systolic hypertension with hypotensive drugs, especially patients with angina pectoris. In patients with hypertensive and arteriosclerotic heart disease, he believes that treatment should start with small doses which are gradually increased under medical supervision.

### PRELUDIN TREATMENT OF OBESITY

Hemmerl and his colleagues from Vienna (*Wien. klin. Wchnschr.*, 68: 665, 1956) have completed an 18-month study of the drug 2-phenyl-3-methyl-tetrahydro-1,4-oxazine, marketed as Preludin for obesity. This drug is a derivative of the adrenaline series, with a central stimulating effect in animal experiments, but a very much less pressor effect than that of adrenaline. They confirm that obese patients can lose with safety 900 g. a week. They also find the drug of value as a psychical stimulant in such conditions as asthma, rheumatoid arthritis and peptic ulcer. Preludin does not affect basal metabolism, fasting blood sugar, blood pressure values or pulse rate. It does, however, increase excretion of 17-ketosteroids, uric acid and creatinine in the urine. It also diminishes sugar tolerance and gastric acid values. The point of action is thought to lie in either the cortex or the diencephalon.

### BRITISH EMPIRE CANCER CAMPAIGN EXCHANGE FELLOWSHIPS

The British Empire Cancer Campaign has established two Fellowships per annum for Canadians. These Fellowships are tenable for 12 months and of an approximate value of £1,500 per annum. Travelling expenses of the Fellows from their Canadian residence to England and return will be borne by the National Cancer Institute of Canada. If necessary, an allowance will also be paid for expenses in connection with the

(Continued on page 66)



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## MEDICAL NEWS in brief

(Continued from page 61)

work undertaken. The Fellowships are open to those engaged in the clinical and allied sciences and to those working in fundamental research.

Application forms may be obtained from: The National Cancer Institute of Canada, 800 Bay Street, Toronto, Ontario.

Applications should be submitted to the above address not later than November 15, 1956. Awards will be announced December 15, 1956. Fellowships will become tenable July 1, 1957.

### DIAGNOSTIC HAZARDS IN THE ELDERLY

Dr. Vine of Brighton, England, (*J. Am. Geriatrics Soc.*, 4: 859, 1956) comments on errors and hazards of bedside diagnosis in the elderly. He has in recent years been in the habit of making visits from hospital to the patient's home for assessment of the need for hospitalization. He believes that greater accuracy can be achieved

in clinical diagnosis by examination of an elderly person in his own home rather than in a formal outpatient clinic. He lists five common hazards in the diagnosis of a "senile" patient, i.e. one usually over 75 years of age with an intermittent confusional state of long duration. The first hazard is failure to recognize the normal changes accompanying old age; if such a patient is inadvertently admitted to hospital the result may be disastrous, since mental adjustment to age can be carried out only in the patient's normal environment. Secondly, common psychoses due to cerebral arteriosclerosis must be distinguished, for the outlook may be considerably better. Thirdly, organic dementia of nonvascular origin, such as that due to intracranial tumour, chronic alcoholism, general paresis of the insane, severe vitamin B deficiency and chronic anoxia, must be distinguished. Fourthly, the greatest tragedy is to miss a subdural hæmorrhage, since at almost any age it is possible to wash out the clot and obtain dramatic recovery. Fifthly, it is often not realized that drugs in the elderly may cause a confusional state. The author has seen cases of confusion which cleared up dramatically when barbiturates, chlorpromazine, hypotensive agents, or insulin was stopped. Lastly, a true depressive psychosis may be present; this is a suicide risk and demands special care and may improve dramatically with electroconvulsive therapy.

There are three major conditions which mimic arthritis: (1) degenerative change in joints as part of the normal aging process; (2) Parkinson's disease; (3) weakness of the legs due to an upper motor neurone lesion, most commonly due to cervical spondylosis which often improves with early treatment.

Dr. Vine warns against the common mistake of supposing that coma in an elderly diabetic is due to diabetic ketosis, when actually a cerebrovascular accident has occurred. The author warns against diagnosis of heart failure without careful investigation. Any heart which carries a person to the age of 70 or over is an organ of fine quality and does not fail without good reason. Anaemia, infection, and thyrotoxicosis should always be thought of in differential diagnosis.

### THE SEQUEL OF ARTIFICIAL RUPTURE OF THE MEMBRANES

Not every patient whose membranes are ruptured begins labour as quickly as might be wished. To obtain some figures on the delay in onset of labour after artificial rupture, Manly (*Lancet*, 2: 227, 1956) analyzed 500 consecutive cases of such rupture in Manchester, England, during 1952 to 1954. There were two maternal deaths, neither considered to be associated with the rupture of the membranes. The commonest indication for artificial rupture of the membranes was postmaturity, the next commonest was that the expected date of delivery had been reached, and the next commonest was toxæmia. In most cases, hind-water puncture with the Drew-Smythe catheter was used, but in some cases the fore-water was punctured. Where the finger could be inserted into the cervix, the membranes were gently swept off the latter in addition to membrane rupture. All but three cases were managed without anaesthesia. Where antepartum hæmorrhage has occurred, however, anaesthesia is necessary in case Cæsarean section is needed. Pro-lapse of the cord is a rare complication and the nature of the presenting part is unimportant. In 255 cases the interval between induction and delivery was less than 24 hours, and in another 150 cases was between 25 and 48 hours. Only in 43 cases was the interval greater than 72 hours. The quality of the liquor was of some significance; if blood was obtained and a fore-water puncture done, labour usually began rapidly; if the liquor was milky, the baby was usually born within 48 hours. Meconium staining was not an indication for urgent section. The more dilated the cervix, the sooner did labour begin, but a closed hard cervix was not a contraindication to the procedure, since 80% of such patients were delivered within three days. The quantity of liquor removed had no relation to the subsequent result.

In 53 cases oxytocin was given by injection (2½ units half-hourly for six doses, unless labour ensued) or intravenously (5 units in 5% glucose at 20 drops a minute); it successfully initiated labour in about half the cases, and did not appear to increase the stillbirth

(Continued on page 69)

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## MEDICAL NEWS in brief

*Continued from page 66)*

rate. Provided the fetus was freely mobile in the uterus, there was no need for alarm if labour had not begun within three days.

### PROLONGED HYPOTHERMIA IN EXPERIMENTAL PNEUMOCOCCAL PERITONITIS

There have been a number of isolated case reports on the use of hypothermia in clinical infections, but these studies in general have not been adequately controlled. Eiseman and his colleagues from the Department of Surgery, University of Colorado School of Medicine (*J. Clin. Invest.*, 35: 940, 1956), have studied the effect of prolonged hypothermia (24 hours) in 160 white mice with type III pneumococcal peritonitis. One hundred and thirty animals served as simultaneous normothermic controls. Temperature was maintained at 19° C., and there was a statistically significant longer period of survival in hypothermic animals than in controls. The survival was greater than could be accounted for merely on the basis of inhibition of bacterial growth, and it is suggested that bacterial multiplication is inhibited at a rate greater than is diminution of the host's immunological response.

### A CLINICAL PUZZLE

In the *Lancet* of August 11, 1956 (page 287) is recorded a most unusual and interesting history. In 1903 a young man of 23 was treated for aneurysm of the aorta with massive doses of potassium iodide; he had a pulsating tumour protruding about one inch and a quarter from the anterior wall of the chest; the tumour was expansile and a bruit was audible. Indeed, at one point the skin over the second left intercostal space gave way and some blood escaped. After he had taken 240 g. of potassium iodide daily for a few weeks, the tumour abated and the patient was apparently cured.

The next episode occurred over 50 years later, when he began to complain of muscular weakness in the arms and leg and back. He later developed sudden violent

substernal pain, suggestive of coronary thrombosis, and which he said was identical with the pain he had had 50 years previously with his aneurysm. A fluctuating and pulsating tumour again appeared over the manubrium sterni. Diagnosis was made at postmortem some time later, when a malignant thymoma was found as the cause of his sternal tumour. It is fasci-

nating to speculate on the relationship between this and his illness 50 years previously. There is no doubt that the original diagnosis of aortic aneurysm was mistaken, yet it is hard to believe that a thymoma regressed and remained quiescent for 53 years. Presumably the first tumour was a solitary cyst of the sternum, formed a hæmatoma and was gradually absorbed.

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